FIG. 1
PRIOR ART

REPLACEMENT
SHEET
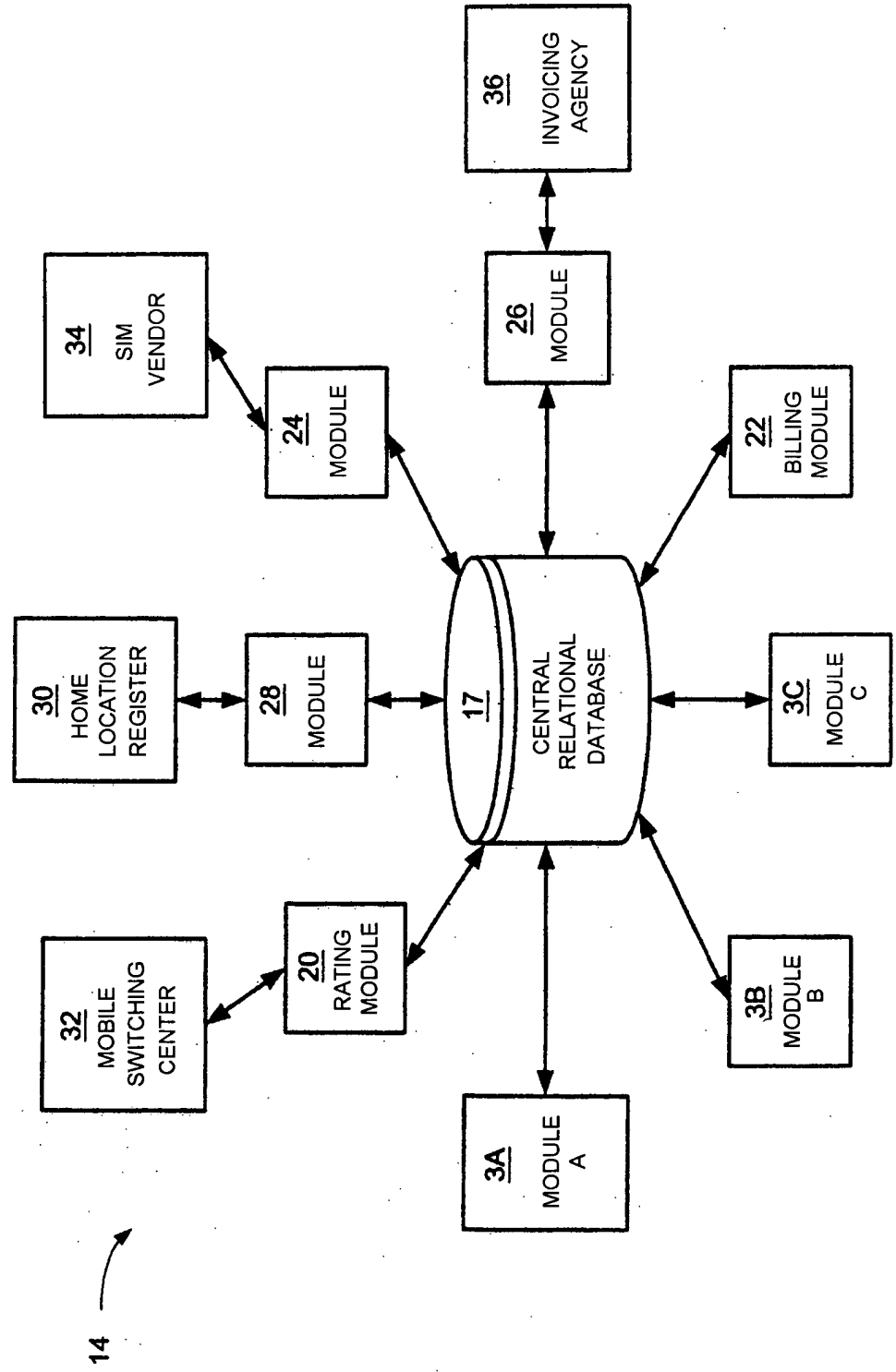
14

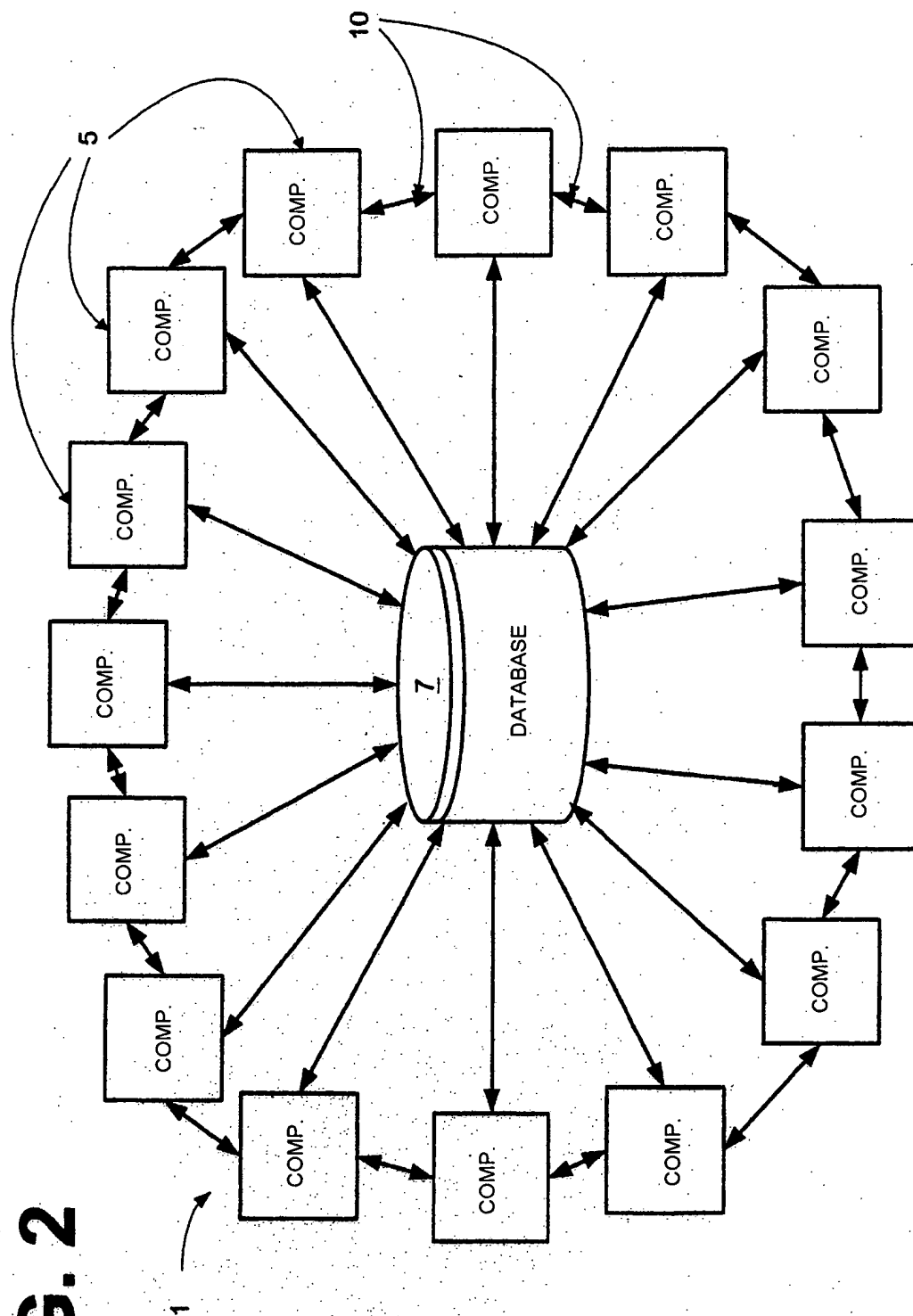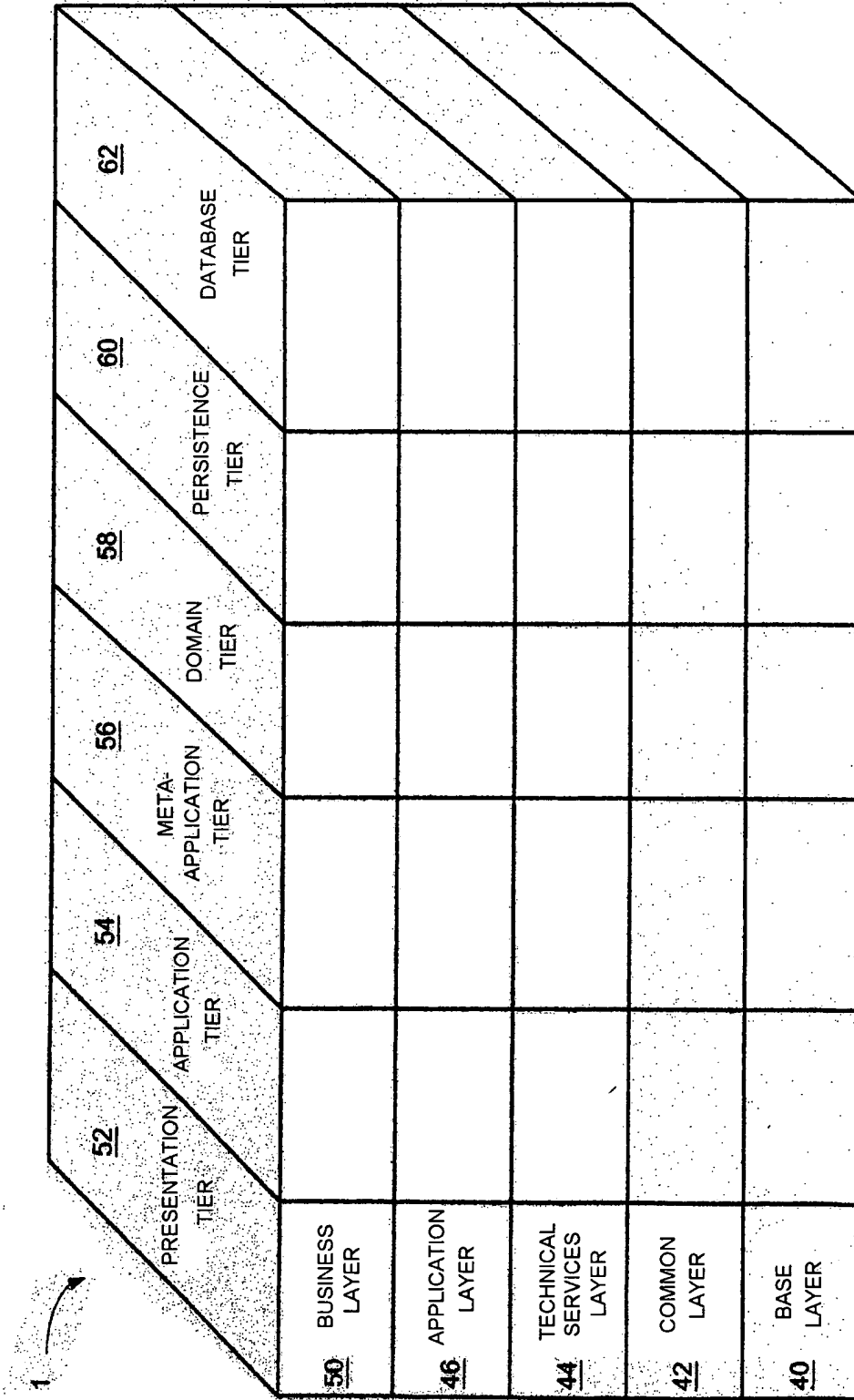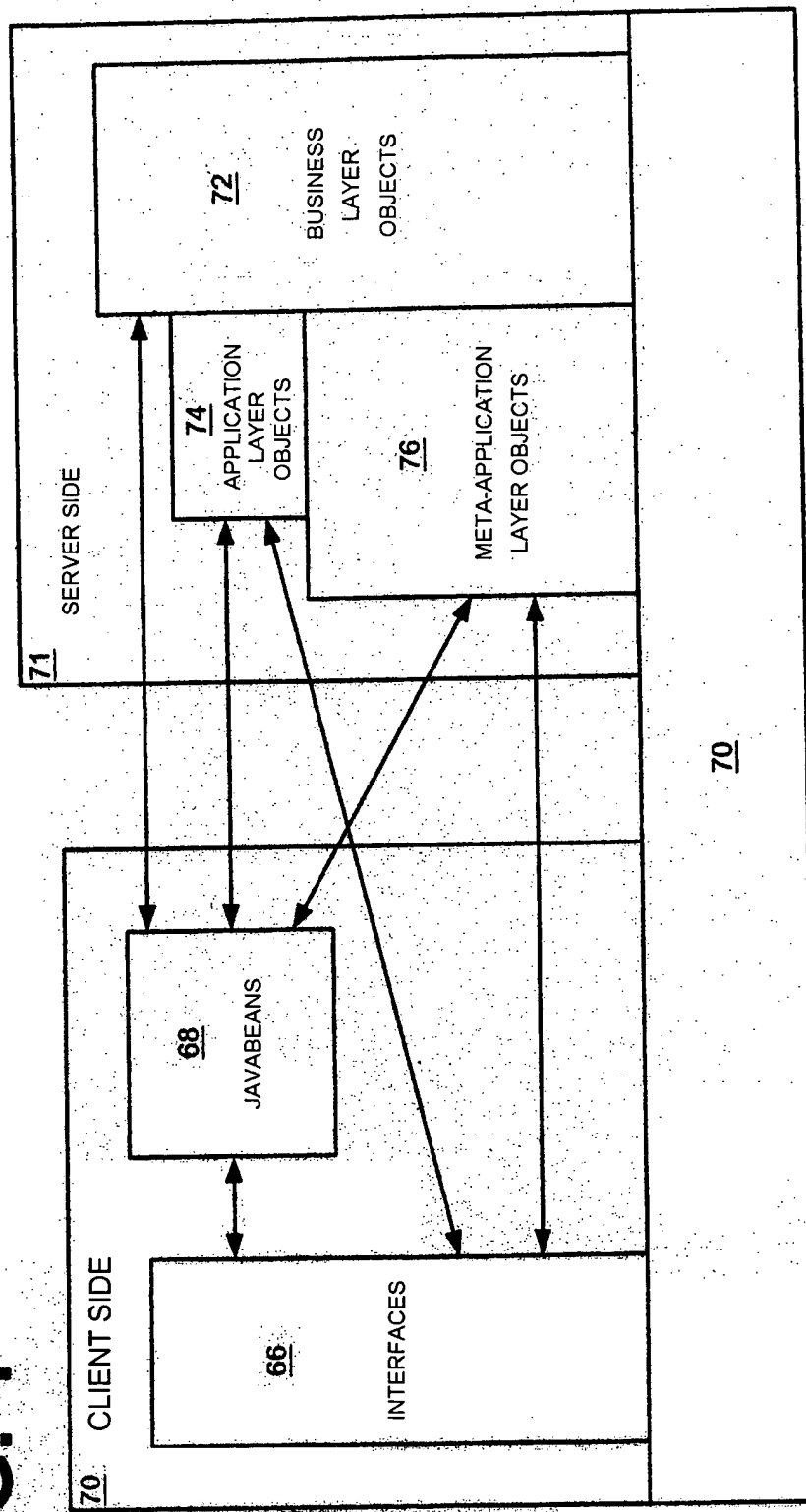**36** INVOICING AGENCY

34 SIM VENDOR

24 MODULE

26 MODULE

22 BILLING MODULE

30 HOME LOCATION REGISTER

28 MODULE

17 CENTRAL RELATIONAL DATABASE

3C MODULE C

32 MOBILE SWITCHING CENTER

20 RATING MODULE

3A MODULE A

3B MODULE B

REPLACEMENT
SHEET

FIG. 2

FIG. 3

1

	PRESENTATION TIER **52**	APPLICATION TIER **54**	META-APPLICATION TIER **56**	DOMAIN TIER **58**	PERSISTENCE TIER **60**	DATABASE TIER **62**
BUSINESS LAYER **50**						
APPLICATION LAYER **46**						
TECHNICAL SERVICES LAYER **44**						
COMMON LAYER **42**						
BASE LAYER **40**						

REPLACEMENT
SHEET

FIG. 4

CLIENT SIDE

SERVER SIDE

71

70

70

66

INTERFACES

68

JAVABEANS

72

BUSINESS
LAYER
OBJECTS

74

APPLICATION
LAYER
OBJECTS

76

META-APPLICATION
LAYER OBJECTS

REPLACEMENT SHEET

1B →
PRESENTATION LOGIC

82 →
80 →
84 →

A.L. ←→ A.L. ←→ A.L.

D.S. ← 12 → D.S. ← D.S.

FIG. 5C

1A →
PRESENTATION LOGIC

82 →
80 →
84 →

A.L. ←→ A.L. ←→ A.L.

DATABASE ← 7

FIG. 5B

PRESENTATION LOGIC ← 14

82 →
80 →
84 →

APPLICATION LOGIC ← 80

CENTRAL RELATIONAL DATABASE ← 17

FIG. 5A
PRIOR ART